Avid

Addendum for the Avid® Symphony™ and Composer Products Setup Guide

Addendum

for the Windows® 2000 Professional Operating System

Important Information

Avid recommends that you read all the information in this addendum thoroughly before installing your Avid system.

Avid has enhanced their product lines by qualifying more hardware since the last printing of the setup guide. This addendum provides the information you need to understand the new supported hardware. This addendum covers:

- Processing Speed

- New Board

- Overview of DV Format and MPEG Format

- Hardware Slot Configurations

Contents

Symbols and Conventions

This addendum uses the following symbol and convention:

Symbol or Convention	Meaning or Action
📄	A note provides important related information, reminders, recommendations, and strong suggestions.

Processing Speed

Avid has qualified the Compaq® EVO W8000 system (W8000 system) with the 2.8-GHz Pentium® 4 chip for use with its applications.

New Board

Avid has qualified the Z6 board for use with specific Avid applications. Table 1 shows the board name and the Avid applications that support it.

Table 1   New Board and Supported Avid Applications

Board	Avid Symphony	Avid Media Composer®	Avid Film Composer®	Avid Xpress®
Z6 3D effects[a]	Supported	Supported	Supported	Supported

a. The Z6 3D effects board (Z6 board) is also used as a carrier board for the 3D effects interface daughter board (3D effects daughter board), and has a 1394 connection for inputting native DV 25 data.

Z6 3D Effects Board

The Z6 board is a new 3D effects board that also provides two other basic functions when you purchase the Avid DV/MPEG option:

• Can act as a carrier board for the 3D effects daughter board normally located on the Meridien™ II digital media board.

• Provides a 6-pin and 4-pin 1394 connector for native DV 25 data when enabled (see Figure 1).
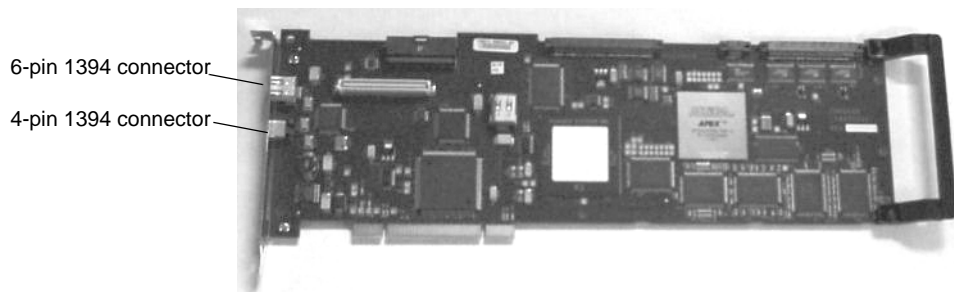

6-pin 1394 connector

4-pin 1394 connector

Figure 1   Z6 Board

When the Z6 board is used as a carrier board for the 3D effects daughter board, you need to connect these boards by using the new, hard, over-the-top connector (see Figure 2).
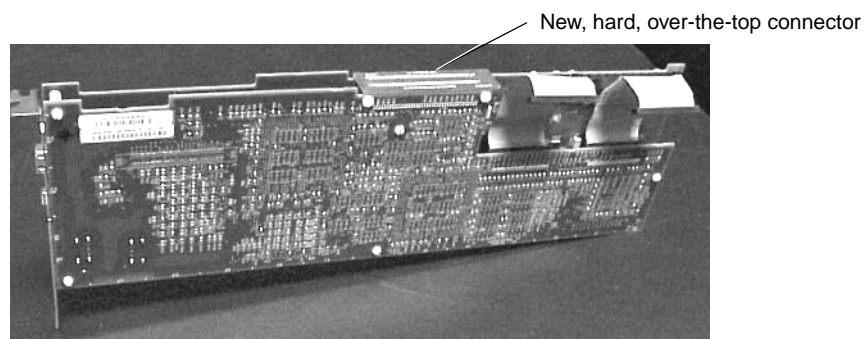

New, hard, over-the-top connector

Figure 2   New, Hard, Over-the-Top Connector

See your local Avid Certified Support Representative (ACSR) for installation of the Z6 board.

Overview of DV Format and MPEG Format

The following three digital formats, although compressed differently, can be edited by Avid systems (all Avid applications are not capable of editing all formats):

- DV 25

- DV 50

- MPEG at 50 Mb/s (MPEG 50 in Avid resolutions)

You must have the Meridien III digital video board set to edit in any of the three digital formats. The Meridien III digital video board set takes up one PCI slot and is made up of the following two boards (see Figure 3):

- Meridien II digital media board (digital media board) — The digital media board provides a PCI interface to the system and the digital video daughter board, and interfaces the inputting and outputting of uncompressed data (not in DV or MPEG format) to and from the Meridien I/O box. It is the baseboard for the digital video daughter board.

- Digital video daughter board — The digital video daughter board takes uncompressed data, DV 25 formatted data, DV 50 formatted data, or MPEG formatted data from the digital media board, and provides compression or decompression for all three digital formats. This allows the Avid application to edit data, to display the data to the monitor, or to send the data back in uncompressed format through the digital media board to the Meridien I/O box.
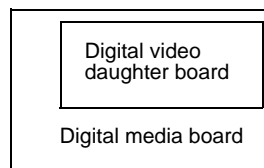

Figure 3   Representation of Meridien III Digital Video Board Set

3D Effects Board Sets Without the DV/MPEG Option

All Avid systems, with the exception of non-3D Avid Xpress, specific MediaStation and specific Media Composer Offline systems, have 3D effects boards. You must have at least one of the following board sets (see Figure 4) to have 3D effects:

- Meridien II digital media board set

- Meridien III digital media board set

- Meridien III-U digital media board set

All of these board sets contain two boards:

- Meridien II digital media board (digital media board) — The digital media board provides a PCI interface to the system and is the baseboard for the 3D effects daughter board.

The Meridien II digital media board is also used as the baseboard for the Meridien III digital video board set explained in "Overview of DV Format and MPEG Format" on page 5.

- A 3D effects daughter board acts as an interface between the system's 3D effects board. You receive different levels of 3D effects depending upon the 3D effects daughter board. These effects include 24p functionality and the Ultimatte® functions.
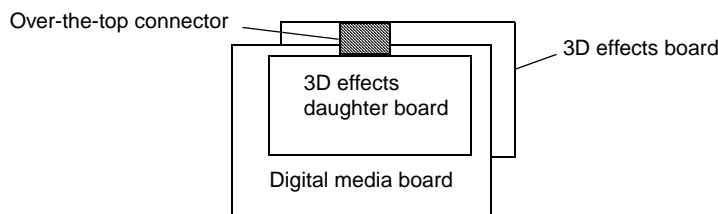

Figure 4   Representation of Meridien Digital Media Board Set

Inputting Native DV 25 Data with 3D Effects Boards Installed

You might need to input native DV 25 data and have 3D effects on the same system. To do this, the digital media board is used as a baseboard for the digital video daughter board. A carrier board allows you to hold the 3D effects daughter board and to connect it to the digital media board by using cables. A cable also connects the carrier board and digital video daughter board (see Figure 5).
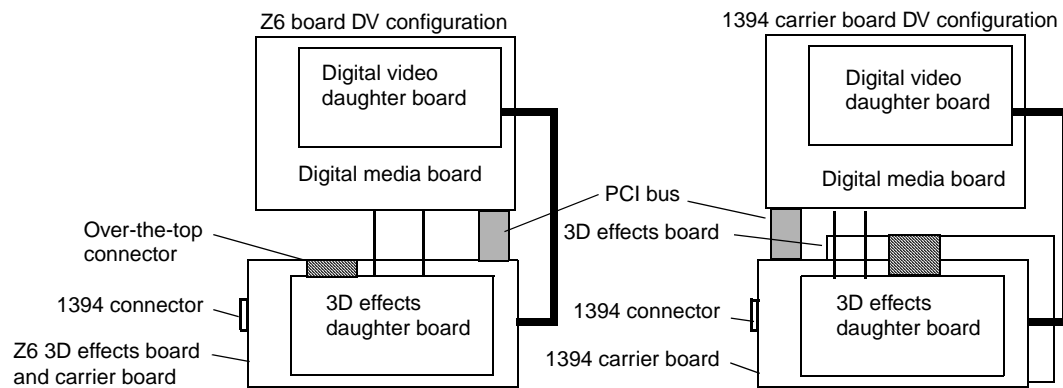

Figure 5   Representation of Native DV Inputs and DV Option with 3D Effects

Avid provides two different types of boards that allow you to directly input data in native DV format and to transfer it over the PCI bus. These boards also act as carrier boards for the 3D effects daughter board, and are not available for all Avid applications or systems.

• 1394 carrier board — Allows you to directly input data in DV 25 format by using the 1394 connection on the board. It also holds the 3D effects daughter board. This board is normally only used in system upgrades when Genie or Mercedes boards are already in the system.

• Z6 board — Is a 3D effects board, but also provides a 1394 connection and can be used as a carrier board. This allows you to directly input data in DV 25 format by using the 1394 connection on the Z6 board. It also holds the 3D effects daughter board that connects to the digital media board and the Z6 board (using the new over-the-top connector). See "DV/MPEG Configuration Using the Z6 Board as a 3D Effects Board and to Input Native DV Data" on page 10.

Editing DV/MPEG Data with No Hardware to Input Native DV

Once you have the digital video daughter board (the DV/MPEG option), you do not need to input native DV or native MPEG data to edit in DV or MPEG format (although you need one of the carrier boards explained in "Inputting Native DV 25 Data with 3D Effects Boards Installed" on page 7). You can input data from an analog tape connected to the Meridien I/O box, record the data in DV 50 format (as an example), edit the data in DV 50 format, and return the uncompressed data to the tape. If you have DV 25, DV 50, or MPEG formatted data stored on an Avid Unity™ system, you can bring that data into the system, edit it, and send it back to the Avid Unity system.

This is not a step-by-step procedure, but it provides a sequential flow of what occurs to allow you to understand some of the basic functions of the boards in the Meridien III digital video board set. You can also use DV 25 or MPEG format in step 2, and the Meridien III digital video board set would perform the same functions for each format.

To edit data from the Meridien I/O box in DV or MPEG format:

1. Connect an analog tape to the Meridien I/O box.

2. Use the Record window when recording to inform the digital video daughter board that DV 50 has been selected as the format you want to store and to edit the uncompressed data being sent from the Meridien I/O box.

3. The uncompressed data arrives at the digital media board, is sent to the digital video daughter board, and compressed to DV 50 format and then sent to disk.

4. Edit the data in DV 50 format from the disk.

5. As you are editing the DV 50 formatted data, it is sent back to the digital video daughter board and changed to the correct format to be displayed on the monitors.

6. When editing is complete, the digital video daughter board uncompresses the edited DV 50 formatted data and sends the uncompressed data back to the digital media board.

7. The digital media board sends the uncompressed data back to the Meridien I/O box to be recorded on tape.

Hardware Slot Configurations

The following sections provide slot configurations for the different DV and MPEG configurations in Compaq W8000 systems.

Z6 Board Used as a 3D Effects Board Only, No DV/MPEG

Table 2 shows the slot locations when the Z6 board is used only as a 3D effects board in an Avid Symphony, Avid Media Composer, Avid Film Composer, or Avid Xpress 3D system.

Table 2   Avid Symphony, Avid Media Composer, Avid Film Composer, and Avid Xpress W8000 System Slot Locations

Slot	Board
AGP	AGP Nvidia 750 XGL, ELSA® DCC, default AGP
PCI slot 1	ATTO™ 2-Gb *optical* Fibre Channel
PCI slot 2	UL3D SCSI board[a]
PCI slot 3	Meridien III or Meridien III-U digital media board set[b]
PCI slot 4	Z6 board used as 3D effects board only[c]
PCI slot 5	Meridien display controller board (EDC4)[d]
PCI slot 6	Free, no SCSI or Fibre Channel option

a. You can also use the built-in Ultra 3 single-channel SCSI port at the rear of the system.
b. This includes the Meridien II digital media board and either the Meridien III, or Meridien III-U 3D effects daughter board.
c. The original hard, over-the-top connector is used between the Z6 board and the 3D effects daughter board.
d. Avid only ships a single-head display controller board (EDC4). If you upgrade to the Z6 board, you might have a dual-head board. If you have a dual-head board, you should only connect the Edit monitor to the boot connector and connect the Bin monitor to the board in the AGP slot.

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DV/MPEG Configuration Using the Z6 Board as a 3D Effects Board and to Input Native DV Data

Table 3 shows the slot locations when you use an Avid Symphony, Avid Media Composer, Avid Film Composer, or Avid Xpress system, and a Z6 board as a 3D effects board and to input native DV data.

Table 3   **Avid Symphony, Avid Media Composer, Avid Film Composer, and Avid Xpress 3D W8000 System Slot Locations**

Slot	Board
AGP	AGP Nvidia 750 XGL, ELSA DCC, default AGP
PCI slot 1	ATTO 2-Gb *optical* Fibre Channel
PCI slot 2	UL3D SCSI board[a]
PCI slot 3	Meridien III digital video board set[b]
PCI slot 4	Z6 board used as 3D effects board, inputs native DV 25, carries 3D effects daughter board[c]
PCI slot 5	Meridien display controller board (EDC4)[d]
PCI slot 6	Not available for use

a. You can also use the built-in Ultra 3 single-channel SCSI port at the rear of the system.
b. This includes the Meridien II digital media board and the Meridien digital video daughter board.
c. A new, hard, over-the-top connector is used between the Z6 board and the 3D effects daughter board attached to it (see Figure 2). The 3D effects daughter board can be either the Meridien III or the Meridien III-U.
d. Avid only ships a single-head display controller board (EDC4). If you perform an upgrade, you might have a dual-head board. If you have a dual-head board, you should only connect the Edit monitor to the boot connector and connect the Bin monitor to the board in the AGP slot.

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